

UPS SYSTEMS AND UPS MONITORING SOFTWARE (OSC-6)

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VERSION (1.0)

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OVERVIEW

The RS6000 server must be protected from unscheduled power outages to ensure that valuable data is not lost or rendered unusable. This document provides information on the Uninterruptible Power Supply (UPS) and monitoring software that is installed for this purpose.

UPS SYSTEMS - UPS MONITORING SOFTWARE

Every IBM RS6000 Financial Server should be connected to a TrippLite UPS supplied during the original DAS installation(s). (Two TrippLite models were installed during the implementation and are the recommended units: Omni 450 Pro and Omni 600 LAN.) The only items which should be connected to the UPS are the IBM RS6000 CPU, tape drive, and monitor. No printers or any other devices should be plugged into the financial server's UPS.

Power Alert software is installed to interface between the TrippLite UPS and the IBM RS6000. This software provides a connection between the UPS and the IBM RS6000 via serial cable #73-0745, a DB9(M) to DB25(F) adapter, and serial port 2 on the IBM RS6000 financial server. In case of a power failure the TrippLite UPS will send a signal to the IBM RS6000 notifying the server that a power outage has occurred. If the power is out for 3 minutes the IBM RS6000 will then begin shutdown procedures.

This is critical since a total power failure without the IBM RS6000 being properly shut down could cause corruption of the operating system and/or loss of your financial data.

To Prepare To Configure Power Alert

1. Verify you have a TrippLite UPS.
2. Verify that only the IBM RS6000 CPU, tape drive, and monitor are connected to the TrippLite UPS.
3. Check for serial cable (73-0745) connected to your UPS.

NOTE: *If you don't have this cable, contact DAS Technical Support or your TrippLite vendor.*

4. Check for a serial adapter DB9(M) to DB25(F). If you do not have this part, it is usually available at Radio Shack, Wal-Mart, or local computer stores for a few dollars. You need this piece before the Power Alert Software can be configured.

INSTALLING AND CONFIGURING POWER ALERT

Testing the UPS

1. Logon as **root** at the console.
2. To verify that no users are logged on the system, at the \$ prompt type:
who (Press **Enter**.)
The numbers of users currently logged on will be shown.
3. When all users are logged off the system, at the \$ prompt type:
shutdown now (Press **Enter**.)
4. When system reports "Halt Completed," either **unplug** the UPS from the wall socket **or push the test button** on the UPS. If the RS6000 stays on, the UPS has passed the first test.
5. To bring the RS6000 back up, press the **yellow reset button twice**. After the RS6000 is back up and the UPS tested, you can configure the Power Alert software.

Configuring Power Alert

1. Logon as **root** at the console.
2. At the \$ prompt, type in **export TERM=vt100** and press **Enter**.
3. Move configure.ups to conf.old. (Rename the existing configuration files.) At the \$ prompt type:
mv /usr/das/ups/configure.ups /usr/das/ups/conf.old (Press **Enter**.)
4. At the \$ prompt, type in **DASups** and press **Enter**.
5. On the screen that appears, choose **option 1** "PowerAlert Configuration" and press **Enter**.
The following screen will appear.

PowerAlert Configuration
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```
Configuration Code:          3
UPS Port Device:             tty0
Device for Diagnostic Output: console
Shutdown Timer:              180 seconds
Polling Interval:            1 seconds
Starting Delay:              300 seconds
Enable Battery Backup Message Broadcasting: YES
Enable Dialing Out On Events: NO
View, Print or Initialize Log File: NO
```

```
CONTROL-E (F8) - Exit, Save and Start PowerAlert
CONTROL-C (ESCAPE) - Quit, Do Not Save
CONTROL-A (F1) - Help
```

6. The settings should be entered as shown above. When you type in the UPS Port Device, you will be asked to remove the cable and plug it back in. Follow the prompts. The port is **S2**, right next to the printer port.
7. When finished entering the information above, press **Control + E (F8)** to save and exit the configuration menu and start up the software. You will then see the **PID** number displayed on the console CRT. If the CRT displays "Battery Low, Starting Shutdown Procedures," check the connections, reconfigure the software (following the instructions above) and try again. If this fails, then the UPS may be bad or the batteries may need to be replaced.

NOTE: *If you consistently receive "weak" or "low" battery messages, you may try replacing the DB9(M)-DB25(F) adapter. A bad adapter, with pins 4 and 6 or 4 and 1 shorted, will also give this message.*

8. If the above works and you didn't get any messages other than the PID starting, then type in the following commands at the \$ prompt:

```
cp -pr /usr/das/ups/halt.das /usr/das/ups/halt.ups2 (Press Enter.)
```

```
cp -pr /etc/rc /etc/rc.backup (Press Enter.)
```

```
cp -pr /usr/das/bin/rc.std /etc/rc (Press Enter.)
```

9. Reboot the system. The PID should be displayed within 5 minutes after the reboot.